

# Key Mappings

## Mirador PC8800 Emulator

Supplement to the PC8800 User's Manual, for software releases V2.20 and subsequent

### Default Mappings for a Standard PC Keyboard (Win32 and Linux)

PC8800 for Linux automatically detects the presence of a standard 101/4-key PC keyboard when it starts up. PC8800 for Windows assumes the presence of a standard keyboard at startup. For the standard PC keyboard, the emulator maps the keys to Intecolor keycodes according to the following tables.

#### Modifier Keys

PC 101 Legend	Intecolor Function	
Shift	Shift	
Ctrl	Control	
Alt	Command	
Caps Lock	Alpha Lock	
(no key)	Repeat	A repeat key is not needed since the PC keyboard provides an autorepeat capability. Beginning with PC8800 software release V2.10, the PC autorepeat function can be turned on or off in Setup.

#### Function Keys

PC 101 Legend	Intecolor Function	Intecolor Codes Generated (hex)				Special Usage
		Normal	Shift	Control	Cmd (Alt)	
Esc	Esc / Setup	0x1b	0x1b	0x1b	NA	Linux only: with ALT, Enter Setup Mode. In Windows, ALT+ESC is a system function.
F1	F1	0xf1	0xd1	0xc1	0xe1	This table gives the default assignments. These keys may alternatively generate codes or strings of codes assigned by the user in Setup at any of the four shift levels.
F2	F2	0xf2	0xd2	0xc2	0xe2	
F3	F3	0xf3	0xd3	0xc3	0xe3	
F4	F4	0xf4	0xd4	0xc4	0xe4	
F5	F5	0xf5	0xd5	0xc5	0xe5	
F6	F6	0xf6	0xd6	0xc6	0xe6	
F7	F7	0xf7	0xd7	0xc7	0xe7	
F8	F8	0xf8	0xd8	0xc8	0xe8	
F9	F9	0xf9	0xd9	0xc9	0xe9	
F10	F10	0xfa	0xda	0xca	0xea	
F11	F11	0xfb	0xdb	0xcb	0xeb	
F12	F12	0xfc	0xdc	0xcc	0xec	
Print Screen	(Print Screen)	Linux only: When a printer is attached and enabled, this key generates a screen print				Note: In Windows, Print Screen is a system function.
Scroll Lock	(Not used)	NA	NA	NA	NA	
Pause/Break	BREAK	When the emulator is on-line a 400 msec break is sent to the host.				

## Auxiliary Keypad

PC 101 Legend	Intecolor Function	Intecolor Codes Generated (hex)				Special Usage
		Normal	Shift	Control	Cmd (Alt)	
Aux Home	Home	0x08	0x08	0x08	0x88	See note
Aux UpAr	Up Arrow	0x1c	0x9c	0x1c	0x9c	
Aux PgUp	Erase Page	0x0c	0x8c	0x0c	0x8c	
Aux LfAr	Left Arrow	0x1a	0x9a	0x1a	0x9a	See note
Aux RtAr	Right Arrow	0x19	0x99	0x19	0x99	
Aux End	(Not used)	NA	NA	NA	NA	
Aux DnAr	Down Arrow	0x0a	0x8a	0x0a	0x8a	
Aux PgDn	Erase Line	0x0b	0x8b	0x0b	0x8b	
Aux Insert	Insert Char	0x1b 0x51	0x1b 0x51	0xb 0x51	0x1b 0x51	
Aux Delete	Delete Char	0x7f	0x7f	0x7f	0xff	

Note: Intecolor codes for 'Home' and 'Left Arrow' functions can be swapped by setting Backspace Code to '^H' in Setup Mode. Assignments shown are for Backspace Code '^Z', the Intecolor default.

## Numeric Keypad

PC 101 Legend	Intecolor Function	Intecolor Codes Generated (hex)				Special Usage
		Normal	Shift	Control	Cmd (Alt)	
Num Lock	(special modifier)	NA	NA	NA	NA	See note below.
NP /	NP /	0x2f	0x3f	0xaf	0xbf	
NP *	NP x	0x2a	0x2a	0x2a	0x2a	
NP -	NP -	0x2d	0x3d	0xad	0xbd	
NP+	NP +	0x2b	0x2b	0x2b	0x2b	
NP Enter	NP =	0x3d	0x3d	0x3d	0x3d	
NP . Del	NP .	0x2e	0x3e	0xae	0xbe	
NP 0 Ins	NP 0	0x30	0xa0	0xb0	0xa0	The codes given here are the defaults, assuming NUM LOCK off. When NUM LOCK is on, these keys can be used with ALT to generate any code between 0 and 255 decimal (0x00 to 0xff hex).
NP 1 End	NP 1	0x31	0xa1	0xb1	0xa1	
NP 2 DnAr	NP 2	0x32	0xa2	0xb2	0xa2	
NP 3 PgDn	NP 3	0x33	0xa3	0xb3	0xa3	
NP 4 LfAr	NP 4	0x34	0xa4	0xb4	0xa4	
NP 5	NP 5	0x35	0xa5	0xb5	0xa5	
NP 6 RtAr	NP 6	0x36	0xa6	0xb6	0xa6	
NP 7 Home	NP 7	0x37	0xa7	0xb7	0xa7	
NP 8 UpAr	NP 8	0x38	0xa8	0xb8	0xa8	
NP 9 PgUp	NP 9	0x39	0xa9	0xb9	0xa9	

## Main Keypad

PC 101 Legend	Intecolor Function	Intecolor Codes Generated (hex)				Special use
		Normal	Shift	Control	Cmd (Alt)	
` ~	` ~	0x60	0x7e	0x80	0x9e	
1 !	1 !	0x31	0x21	0xb1	0xa1	
2 @	2 @	0x32	0x40	0xb2	0x00	
3 #	3 #	0x33	0x23	0xb3	0xa3	
4 \$	4 \$	0x34	0x24	0xb4	0xa4	
5 %	5 %	0x35	0x25	0xb5	0xa5	
6 ^	6 ^	0x36	0x5e	0xb6	0x1e	
7 &	7 &	0x37	0x26	0xb7	0xa6	
8 *	8 *	0x38	0x2a	0xb8	0xaa	
9 (	9 (	0x39	0x28	0xb9	0xa8	
0 )	0 )	0x30	0x29	0xb0	0xa9	
- _	- _	0x2d	0x5f	0xad	0x1f	
= +	= +	0x3d	0x2b	0xbd	0xab	
Backspace	Left Arrow	0x1a	0x9a	0x1a	0x9a	Same as Left Arrow in Aux Pad
Tab	Tab	0x09	0x89	0x09	0x89	Note: In Windows, ALT+TAB is used by the system.
Q	Q	0x71	0x51	0x11	0x91	Control Q can be alternatively assigned local function "Hold Screen" (stop scrolling) in Setup.
W	W	0x77	0x57	0x17	0x97	
E	E	0x65	0x45	0x05	0x85	
R	R	0x72	0x52	0x12	0x92	
T	T	0x74	0x54	0x14	0x94	
Y	Y	0x79	0x59	0x19	0x99	
U	U	0x75	0x55	0x15	0x95	
I	I	0x69	0x49	0x09	0x89	
O	O	0x6f	0x4f	0x0f	0x8f	
P	P	0x70	0x50	0x10	0x90	
[ {	[ {	0x5b	0x7b	0x1b	0x9b	
] }	] }	0x5d	0x7d	0x1d	0x9d	
\	\	0x5c	0x7c	0x1c	0x9c	
A	A	0x61	0x41	0x01	0x81	
S	S	0x73	0x53	0x13	0x93	Control S can be alternatively assigned local function "Release Screen" (resume scrolling) in Setup
D	D	0x64	0x44	0x04	0x84	
F	F	0x66	0x46	0x06	0x86	
G	G	0x67	0x47	0x07	0x87	
H	H	0x68	0x48	0x08	0x88	
J	J	0x6a	0x4a	0x0a	0x8a	
K	K	0x6b	0x4b	0x0b	0x8b	

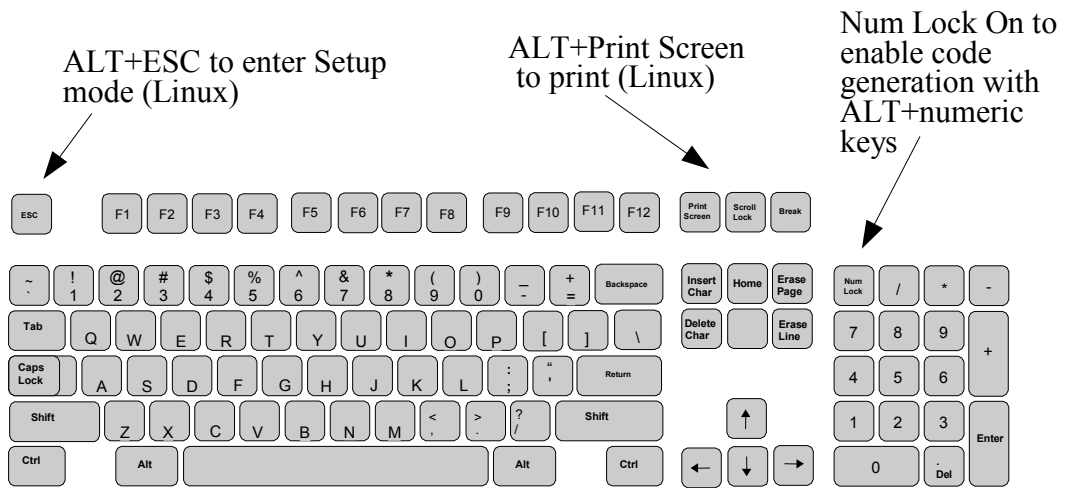
PC 101 Legend	Intecolor Function	Intecolor Codes Generated (hex)				Special use
		Normal	Shift	Control	Cmd (Alt)	
L	L	0x6c	0x4c	0x0c	0x8c	
::	::	0x3b	0x3a	0xbb	0xba	
“	“	0x27	0x22	0xa7	0xa2	
Enter	Return	0x0d	0x8d	0x0d	0x8d	
Z	Z	0x7a	0x5a	0x1a	0x9a	
X	X	0x78	0x58	0x18	0x98	ALT X can be alternatively assigned local function “Exit Program” in Setup
C	C	0x63	0x43	0x03	0x83	
V	V	0x76	0x56	0x16	0x96	
B	B	0x62	0x42	0x02	0x82	
N	N	0x6e	0x4e	0x0e	0x8e	
M	M	0x6d	0x4d	0x0d	0x8d	
, <	, <	0x2c	0x3c	0xac	0xbc	
. >	. >	0x2e	0x3e	0xae	0xbe	
/ ?	/ ?	0x2f	0x3f	0xaf	0xbf	
Space Bar	Space Bar	0x20	0xa0	0x20	0xa0	

### ***Intecolor 117-key Keyboard Keys Not Mapped***

You can generate the equivalent codes using the Numeric Pad. Set NUM LOCK on, hold down the ALT key and type the decimal equivalent of the desired code.

Intecolor Legend	Intecolor Codes (hex)			
	Normal	Shift	Control	Cmd
F13	0xfd	0xdd	0xed	0xcd
F14	0xfe	0xde	0xee	0xce
F15	0xff	0xdf	0xef	0xcf
F0	0xf0	0xd0	0xe0	0xc0
Colpad Black	0x10	0x90	0x10	0x90
Colpad Red	0x11	0x91	0x11	0x91
Colpad Green	0x12	0x92	0x12	0x92
Colpad Yellow	0x13	0x93	0x13	0x93
Colpad Blue	0x14	0x94	0x14	0x94
Colpad Magenta	0x15	0x95	0x15	0x95
Colpad Cyan	0x16	0x96	0x16	0x96
Colpad White	0x17	0x97	0x17	0x97
Auto	0x1b 0x49	0x1b 0x49	0x1b 0x49	NA
FG On	0x1d	0x1d	0x1d	0x9d
BG On	0x1e	0x1e	0x1e	0x9e
Blink On	0x1f	0x1f	0x1f	0x9f
2X/Blink Off	0x0f	0x8f	0x0f	0x8f
2X Char On	0x0e	0x8e	0x0e	0x8e
Insert Line	0x1b 0x55	0x1b 0x55	0x1b 0x55	0x1b 0x55
Delete Line	0x1b 0x56	0x1b 0x56	0x1b 0x56	0x1b 0x56

# Keyboard Layout



## Mappings for Mirador 122-Key PC Keyboard (Win32 and Linux)

PC8800 for Linux automatically detects the presence of a Mirador supplied 122-key PC keyboard when it starts up. PC8800 for Windows can recognize the 122-key keyboard only after the scancode map in the system registry has been set up for this keyboard using the utility program `wscanmap.exe` (supplied with the Windows distribution of the emulator) and the system has been rebooted to make the map effective.

The following tables describe PC8800's mappings of raw keycodes from a 122-key PC keyboard to Intecolor keycodes.

Unless otherwise noted, the PC 122 Legend corresponds to the Intecolor function.

### Modifier Keys

PC 122 Legend	Intecolor Function	
Shift	Shift	
Control	Control	
Alt	Command	
Caps Lock	Alpha Lock	
Command (left)	Command	
Command (right)	Command	
(no key)	Repeat	A repeat key is not needed since the PC keyboard provides an autorepeat capability. Beginning with PC8800 software release V2.10, the PC autorepeat function can be turned on or off in Setup.

### Auxiliary Keypad

PC 122 Legend	Intecolor Function	Intecolor Codes Generated (hex)				Special Usage
		Normal	Shift	Control	Alt	
	Delete Line	0x1b 0x56	0x1b 0x56	0x1b 0x56	0x1b 0x56	
	Home	0x08	0x08	0x08	0x88	
	Down Arrow	0x0a	0x8a	0x0a	0x8a	
	Insert Char	0x1b 0x51	0x1b 0x51	0x1b 0x51	0x1b 0x51	
	Right Arrow	0x19	0x99	0x19	0x99	
	Left Arrow	0x1a	0x1a	0x1a	0x9a	
	Up Arrow	0x1c	0x9c	0x1c	0x9c	
	Erase Page	0x0c	0x8c	0x0c	0x8c	
	Delete Char	0x7f	0x7f	0x7f	0x7f	
	Erase Line	0x0b	0x8b	0x0b	0x8b	
	Insert Line	0x1b 0x55	0x1b 0x55	0x1b 0x55	0x1b 0x55	

## Function Keys

PC 122 Legend	Intecolor Function	Intecolor Codes Generated (hex)				Special Use
		Normal	Shift	Control	Alt	
	AUTO	0x1b 0x49	0x1b 0x49	0x1b 0x49	NA	
	FG ON	0x1d	0x1d	0x1d	0x9d	
	BG ON	0x1e	0x1e	0x1e	0x9e	
	BLINK ON	0x1f	0x1f	0x1f	0x9f	
	2X/BLINK OFF	0x0f	0x8f	0x0f	0x8f	
	2X CHAR ON	0x0e	0x8e	0x0e	0x8e	
	DEL	0x7f	0x9f	0x7f	0x9f	
	BREAK	Sends a 400 msec break to the host.				
	F12	0xfc	0xdc	0xcc	0xec	This table gives the default assignments. These keys may alternatively generate codes or strings of codes assigned by the user in Setup at any of the four shift levels.
	F13	0xfd	0xdd	0xcd	0xed	
	F14	0xfe	0xde	0xce	0xee	
	F15	0xff	0xdf	0xcf	0xef	
	F0	0xf0	0xd0	0xc0	0xe0	
	F1	0xf1	0xd1	0xc1	0xe1	
	F2	0xf2	0xd2	0xc2	0xe2	
	F3	0xf3	0xd3	0xc3	0xe3	
	F4	0xf4	0xd4	0xc4	0xe4	
	F5	0xf5	0xd5	0xc5	0xe5	
	F6	0xf6	0xd6	0xc6	0xe6	
	F7	0xf7	0xd7	0xc7	0xe7	
	F8	0xf8	0xd8	0xc8	0xe8	
	F9	0xf9	0xd9	0xc9	0xe9	
	F10	0xfa	0xda	0xca	0xea	
	F11	0xfb	0xdb	0xcb	0xeb	

## Numeric Keypad

PC 122 Legend	Intecolor Function	Intecolor Codes Generated (hex)				Special Use
		Normal	Shift	Control	Cmd/Alt	
	Setup	NA	NA	NA	NA	Linux only: with Shift or ALT, Setup Entry.
	(Print Screen)	NA	NA	NA	NA	Linux only: Print Screen
	NP /	0x2f	0x3f	0xaf	0xbf	
	NP x	0x2a	0x2a	0x2a	0x2a	
	NP -	0x2d	0x2d	0xad	0xbd	
	NP +	0x2b	0x2b	0x2b	0x2b	
	NP =	0x3d	0x3d	0x3d	0x3d	
	NP .	0x2e	0x3e	0xae	0xbe	
	NP 0	0x30	0xa0	0xb0	0xa0	
	NP 1	0x31	0xa1	0xb1	0xa1	
	NP 2	0x32	0xa2	0xb2	0xa2	
	NP 3	0x33	0xa3	0xb3	0xa3	
	NP 4	0x34	0xa4	0xb4	0xa4	
	NP 5	0x35	0xa5	0xb5	0xa5	
	NP 6	0x36	0xa6	0xb6	0xa6	
	NP 7	0x37	0xa7	0xb7	0xa7	
	NP 8	0x38	0xa8	0xb8	0xa8	
	NP 9	0x39	0xa9	0xb9	0xa9	

## Main Keypad

PC 122 Legend	Intecolor Function	Intecolor Codes Generated (hex)				Special Use
		Normal	Shift	Control	Cmd/Alt	
	ESC	0x1b	0x1b	0x1b	NA	In Windows, ALT + ESC is a system function.
	1 !	0x31	0x21	0xb1	0xa1	
	2 @	0x32	0x40	0xb2	0x00	
	3 #	0x33	0x23	0xb3	0xa3	
	4 \$	0x34	0x24	0xb4	0xa4	
	5 %	0x35	0x25	0xb5	0xa5	
	6 ^	0x36	0x5e	0xb6	0x1e	
	7 &	0x37	0x26	0xb7	0xa6	
	8 *	0x38	0x2a	0xb8	0xaa	
	9 (	0x39	0x28	0xb9	0xa8	
	0 )	0x30	0x29	0xb0	0xa9	
	- _	0x2d	0x5f	0xad	0x1f	
	= +	0x3d	0x2b	0xbd	0xab	
Backspace	Left Arrow	0x1a	0x1a	0x1a	0x9a	Same as Left Arrow in Aux Pad
	TAB	0x09	0x89	0x09	NA	In Windows, ALT + Tab is a system function.
	Q	0x71	0x51	0x11	0x91	Control Q can be alternatively assigned local function "Hold Screen" (stop scrolling) in Setup
	W	0x77	0x57	0x17	0x97	
	E	0x65	0x45	0x05	0x85	
	R	0x72	0x52	0x12	0x92	
	T	0x74	0x54	0x14	0x94	
	Y	0x79	0x59	0x19	0x99	
	U	0x75	0x55	0x15	0x95	
	I	0x69	0x49	0x09	0x89	
	O	0x6f	0x4f	0x0f	0x8f	
	P	0x70	0x50	0x10	0x90	
	[ {	0x5b	0x7b	0x1b	0x9b	
	] }	0x5d	0x7d	0x1d	0x9d	
Enter	RETURN	0x0d	0x8d	0x0d	0x8d	
	A	0x61	0x41	0x01	0x81	
	S	0x73	0x53	0x13	0x93	Control S can be alternatively assigned local function "Release Screen" (resume scrolling) in Setup
	D	0x64	0x44	0x04	0x84	
	F	0x66	0x46	0x06	0x86	
	G	0x67	0x47	0x07	0x87	
	H	0x68	0x48	0x08	0x88	
	J	0x6a	0x4a	0x0a	0x8a	
	K	0x6b	0x4b	0x0b	0x8b	
	L	0x6c	0x4c	0x0c	0x8c	
	; :	0x3b	0x3a	0xbb	0xba	
	' "	0x27	0x22	0xa7	0xa2	



PC 122 Legend	Intecolor Function	Intecolor Codes Generated (hex)				Special use
		Normal	Shift	Control	Alt	
		0x5c	0x7c	0x1c	0x9c	
	~	0x60	0x7e	0x80	0x9e	
	Z	0x7a	0x5a	0x1a	0x9a	
	X	0x78	0x58	0x18	0x98	ALT X can be alternatively assigned local function "Exit Program" in Setup
	C	0x63	0x43	0x03	0x83	
	V	0x76	0x56	0x16	0x96	
	B	0x62	0x42	0x02	0x82	
	N	0x6e	0x4e	0x0e	0x8e	
	M	0x6d	0x4d	0x0d	0x8d	
	, <	0x2c	0x3c	0xac	0xbc	
	. >	0x2e	0x3e	0xae	0xbe	
	/ ?	0x2f	0x3f	0xaf	0xbf	
	Space Bar	0x20	0xa0	0x20	0xa0	

## Left Keypad

PC 122 Legend	Intecolor Function	Intecolor Codes Generated (hex)				Special Use
		Normal	Shift	Control	Cmd/Alt	
	Col Pad Black	0x10	0x90	0x10	0x90	
	Col Pad Red	0x11	0x91	0x11	0x91	
	Col Pad Green	0x12	0x92	0x12	0x92	
	Col Pad Yellow	0x13	0x93	0x13	0x93	
	Col Pad Blue	0x14	0x94	0x14	0x94	
	Col Pad Magenta	0x15	0x95	0x15	0x95	
	Col Pad Cyan	0x16	0x96	0x16	0x96	
	Col Pad White	0x17	0x97	0x17	0x97	

## Keyboard Layout

